CINCH systems inc.

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Installation Instructions

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Mar 2016

Ce-Door-EZ

Ce-Door-EZ

Part #: Ce-Door-EZ

Contents

Product Summary

Overview

The Ce-Door-EZ Module allows for door/gate command and control operation, the embedded circuit board provides digital supervised inputs and relay controlled outputs, on-board programing allows for easy installations and quick set-ups.

The Ce-Door-EZ Module monitors /measures /controls the following:

Standard digital inputs:

- ✓ Manual Open
- ✓ Manual Close
- ✓ Manual Stop
- ✓ Auto/Manual Select
- ✓ Card Reader
- ✓ Fire Input
- ✓ Interlock Safety
- ✓ Safety 1
- ✓ Safety 2
- ✓ Safety 3
- ✓ Safety 4
- ✓ Photo Eye
- ✓ Photo Eye
- ✓ Radio Input
- ✓ Open Limit Switch
- ✓ Close Limit Switch
- ✓ Auxiliary Input (Enclosure Tamper)

DC Voltage Outputs:

- ✓ 24VDC for 3-wire devices
- ✓ 24VDC for 3-wire devices

Standard Relay Outputs:

- ✓ Open
- ✓ Close
- ✓ Close Warning
- ✓ Output 1
- ✓ Door in Motion
- ✓ Door Position
- ✓ Traffic Lights/HVAC

The Ce-DOOR-EZ Module has an integrated 2x16 LCD Display to allow for easy service review of system metrics. These metrics are also stored on the integrated SD card.

The module monitors all inputs and alerts the panel if there is an open/short circuit by using a 3.0K ohm end-of-line (EOL) resistor on each digital input.

The Ce-DOOR-EZ Module comes with the 3.0K ohm EOL resistors required

Power for the Ce-Door-EZ Module is provided by:

Ce-Door-EZ

- 24VAC Power Transformer, input is variable 120/240/277/480 VAC 100 VA Part # ACC-T24-100

CeLAN AES encrypted digital data bus technology provides secure, fast and reliable data transfer between the Rampart Panel and CeLAN modules.

An AES encrypted HeLAN is also available on-board to provide a high-speed data transfer bus for HeLAN devices

- He-Motor
- He-MDC (Manual Door Controller)

Features

- Five (5) Form- A relays that are, supervised, and dedicated for their purpose. And Two (2) Form C relays for Aux/Traffic Lights and Door Position
- Seventeen (17) fully supervised inputs (require 3.0K resistors) with dedicated purposes per module
    - Five (5) state inputs:
        - Open Circuit
        - Supervised Circuit (3k EOL)
        - Short Circuit
        - Ground Fault High
        - Ground Fault Low
- On-Board 2x16 LCD Display for reviewing system metrics.
- CeLAN AES encrypted technology for security, easy setup and enhanced performance.
- HeLAN high speed encrypted data bus
- 'CINCH Stick' Field Upgradeable

Installation

Planning the Installation
This section describes system capabilities to help you get familiar with the system.

Panel Components

Before installing devices and making wiring connections, familiarize yourself with the main panel components. Figure 1 shows the main component locations for the circuit

Panel Terminals

Table 1 describes each of the controller's terminals

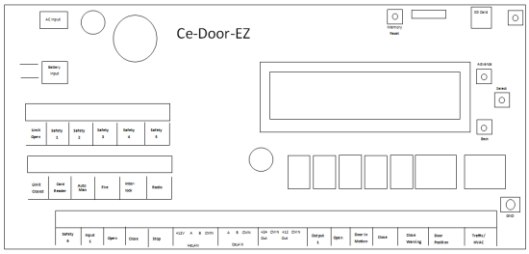


Figure 1 Ce-Door

Function	Purpose
AC Input	24VAC
AC Input	
24VDC	24 VDC
24VDC	
Card Reader	Card Reader
Return	
Safety 1	Safety Input
Return	
Safety 2	Safety Input
Return	
Safety 3	Safety Input
Return	
Safety 4	Photo Eye
Return	
Safety 5	Photo Eye
Return	
24VDC	24 VDC
24VDC	
Limit Close	Limit SW Closed
Return	
Limit Open	Limit SW Open
Return	
Auto/Manual	Auto/Man Operation
Return	
Fire	Fire Input
Return	
Interlock	Interlock Input
Return	
Radio	Radio Input
Return	

Ce-Door-EZ

EFO	**EFO**
Return	
Safety 6	**Safety Input**
Return	
Input 1	**Enclosure Tamper**
Return	
Manual Open	**Manual Open Input**
Return	
Manual Close	**Manual Close Input**
Return	
Manual Stop	**Manual Stop Input**
Return	

+12VDC	**HeLAN**
Bus A	
Bus B	
Common	
Bus A	**CeLAN**
Bus B	
Common	
+24VDC	**+24VDC Out**
Common	
+12VDC	**+12VDC Out**
Common	
Output 1	**Output 1 Relay**
Return	
Open Output	**Open Output Relay**
Return	
Door in Motion	**Door in Motion Relay**
Return	
Close Output	**Close Output Relay**
Return	
Close Warning	**Close Warning Relay**
Return	
NO	**Door Position Relay**
CMN	
NC	
NO	**HVAC/Traffic Relay**
CMN	
NC	

Table 1: Ce-Door-EZ Terminals

Panel Accessories

The components listed in Table 2 are included with the DOOR-EZ module and available for purchase

Part #	Description	Qty.
FAS 72500	#6-32 x 3/16" Phillips Pan Head Machine Screw 18-8 Stainless Steel	8
FAS 0146057	6-32x3/8 Alum 1/4 Hex Standoff	4
FAS 1133610	#6 L/W Z	4
3k-Ohm Resistor	RES 3.01K OHM 1/4W 1% METAL FILM	18

Table 2 Accessory Kit

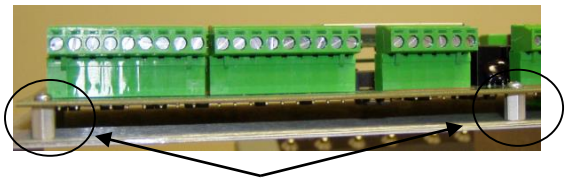
Mounting the Ce-Door-EZ

Note: when installing it is important to use the standoffs to mount the circuit board

Select a NEMA rated enclosure that best fits the installation site.

Mounting the module:

1. Mark the location for the five mounting holes in the DOOR-EZ module
2. Using the spacers mount the module in the enclosure



Mount spacers under each mounting hole location

Grounding the panel

WARNING

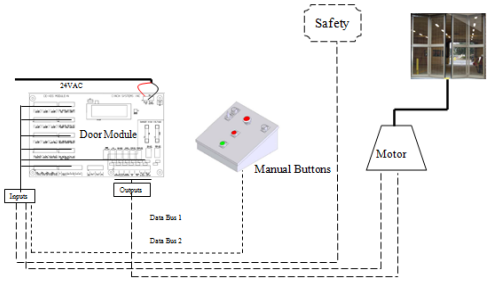
All circuit boards must be properly grounded in accordance with the National Electrical Code to protect against electrical surges . Failure to do so will result in circuit board damage and void all warranties.

Ce-Door-EZ

The DOOR-EZ module must be grounded in accordance to NEC standards. Connect a16 AWG or greater copper wire to the ground terminal and connect to an approved ground location.

Ground terminal located in the lower right corner of the board Proper NEC grounding is essential for proper safety and operation.

- ✓ DOOR-EZ Module (enclosure)
- ✓ Safety Loop(s) (optional)
- ✓ Enclosure
- ✓ 24VAC Transformer
- ✓ Backup Battery



Installing the System

The DOOR-EZ module can be installed as a stand-alone (single door/gate, single controller) or in an enterprise installation using a Rampart control panel, multiple door/gates and controllers in a single system.

This section describes how to install DOOR-EZ. Before starting the installation, plan your system layout and programming.

Installing the system consists of the following:

- ✓ Determining the panel location.
- ✓ Run wires to the panel location.
- ✓ System wire lengths.
- ✓ Mounting the panel.
- ✓ Connecting CeLAN modules and touch screens.
- ✓ Connecting communications
- ✓ Wiring input/outputs
- ✓ Connecting input power
- ✓ Installing the backup battery(s) to power supply
- ✓ Powering up the panel

Stand-Alone Installation

Before permanently mounting the product verify all of the required equipment is available.

Required Product:

Enclosure:

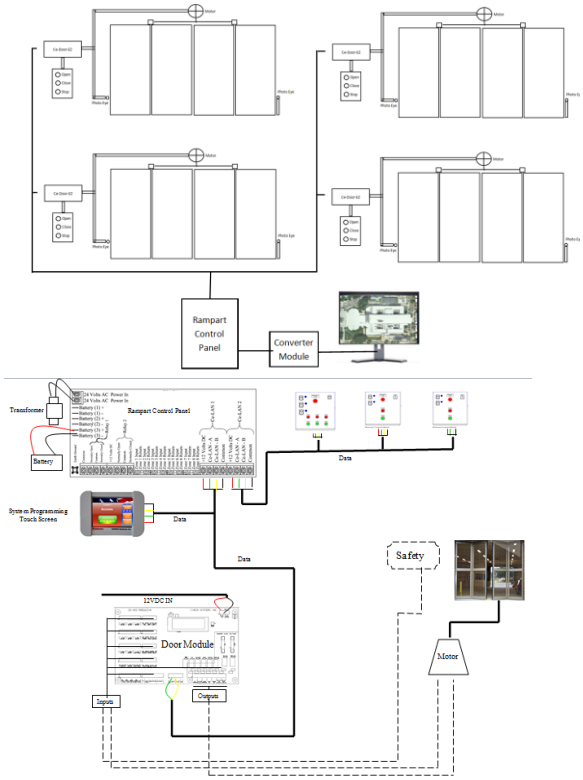
For a stand-alone installation the DOOR-EZ module, power supply and safety device (if needed) are installed in a single enclosure.

Enterprise Installation

An enterprise installation includes all of the items from a stand-alone installation plus a Rampart control panel which creates the data bus that connects multiple Ce-Door-EZ modules together.

The Rampart control panel controls up to 20 Ce-Door-EZ modules at one time, the modules are connected to the CeLAN data bus of the Rampart and controlled using pushbuttons, Rampart touch screens or computer touch screens

Ce-Door-EZ



Data communications:

The Rampart control panel manages the system through an RS485 data bus; the data bus originates at the Rampart panel and terminates at a CeLAN module. The data bus communication:

RS485 - Copper (22-24AWG)
Fiber Optics (using Ce-FC-N Module)
Network (using Ce-TCP Module)

He-LAN Operation

The Ce-Door-EZ module has a He-LAN connection for specific He-LAN modules. He-LAN modules connect directly to the D=Ce-Door -EZ module and are enrolled at power up and also through a programming option.

The He-LAN connection allows the use of data bus modules without using a Rampart control panel.

He-LAN modules:

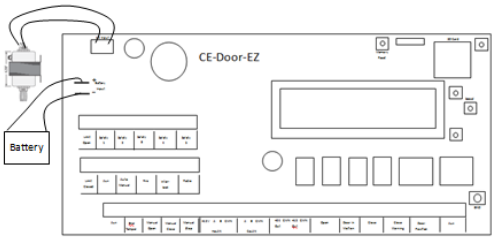
- He-Motor
- He-MDC

Powering the Ce-Door-EZ

The Ce-Door-EZ is powered by 24VAC transformer and able to deliver 12VDC @ 5A Max or 24VDC @ 2.5A for a total of 60 watts.

Transformer Specifications:

- ACC-T24-100 Transformer
- VA Rating: 100
- Frequency 50/60 Hz
- Over Current Protection: Circuit Breaker
- Dimensions: 3.000” x 2.500” x 4.250:
- (w/ .500” NPT Hubs)
- Wire Length: (min 8”) 9.5” Typical w/ .5” Strip
- Operating temperature: -30 to 140° F
- MTBF: 100,000 Hours @ 77° F
- Construction: Split-Bobbin
- Weight: 4.60 lbs.
- Approvals: Class 2 UL5085-3 Listed, C-UL, CE, RoHS



The Ce-Door-EZ supplies 12 VDC @ 5A and 24 VDC @2.5A or a combination up to 60 watts.

Back-up Battery

The Ce-Door-EZ uses a 12VDC back-up battery in case of AC power loss. The back-up battery is monitored by the on-board LCD

Note: the Ce-Door-EZ is capable of handling up to an 18Ah back-up battery.

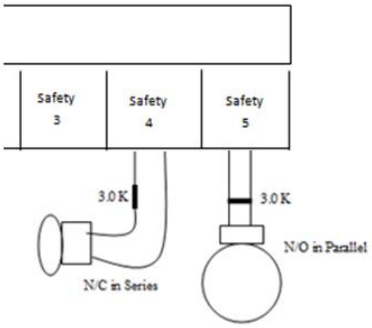
Ce-Door-EZ

Input Wiring:

All inputs on the DOOR-EZ module are supervised and require a 3.0K ohm resistor at the controlling device to supervise the wiring. End of Line Resistors (EOL) need to be installed at the supervised device.

All inputs require a 3.0K ohm resistor; the system will supervise the wiring for the following conditions:

- Open Circuit,
- Supervised Circuit (3k EOL),
- Short Circuit,
- Ground Fault High,
- Ground Fault Low



Note: the 3.0K ohm resistor should be located at the device being wired for proper supervision

Note: EOL is wired in series for N/C and in parallel for N/O

Each DOOR-EZ Module includes 17 pre-wired EOL resistors. These resistors are designed to make it easier to connect the resistor at the device rather than the circuit board

Wiring Safety Devices and Limit Switches

The Door-EZ provides 24VDC for device operation. The panel is set-up to power and operate 3-wire NPN devices.

Important: For proper supervision and operation only **NPN** devices should be used.

Safety Inputs:

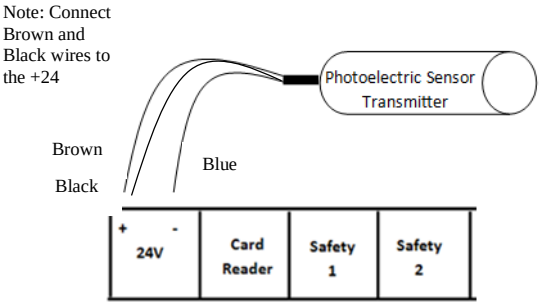
For UL listed installations Safety Inputs 1 and 2 and the He-Motor board will sound the warning horn if two are tripped at the same time. The horn will sound for 5 minutes or until a safety is cleared

Photo Eye Operation:

A Transmitter and Receiver are required for Photo eye operation. The transmitter requires 24VDC and the receiver requires both 24VDC and a zone input.

Transmitter Installation:

The transmitter must be connected to the 24VDC output located on the top row of terminals.

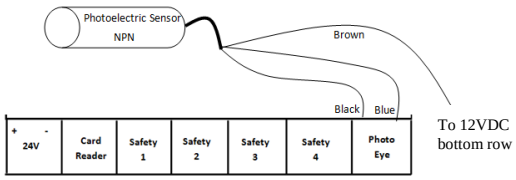


Note: Only NPN type photo eyes are compatible
Telco – SMT 3000C TB 5 U, SMR 3006 TB 5 U

Receiver installation:

The receiver requires 12VDC and connection to one of the two Photo Eye inputs, connect the brown wire to the 12DVDC connection on the bottom row of terminals

Ce-Door-EZ



Limit Switch Installation:

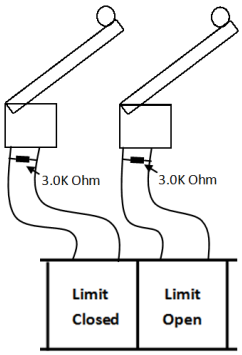
The Door-EZ has an input for a close and open limit switch, these inputs are for contact closure type inputs (normally a mechanical type limit switch)

If a proximity limit switch is used a CO-Prox board must be used. The CO-Prox board connects directly to the Door-EZ limit switch inputs.

Mechanical limit switch:

When using a mechanical style type limit switch the Door-EZ input requires a 3.0K Ohm resistor for line supervision

The input can be configured for NO or NC in programming.



Mechanical Limit Switches

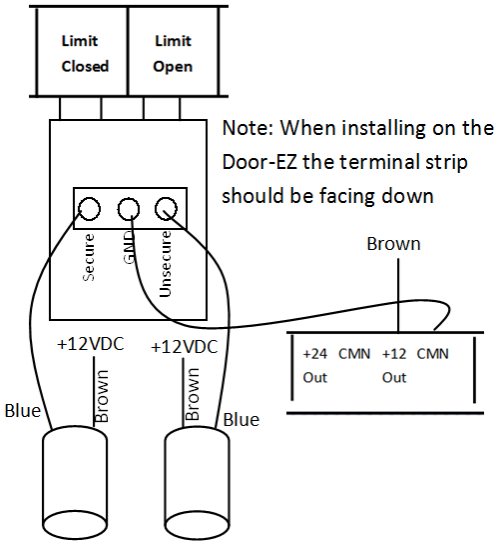
Proximity limit switches:

When using a Proximity limit switch a CO-Prox board must be used. The CO-Prox board allows the powered proximity sensors to operate on the Door-EZ input.

The CO-Prox board has four pins that connect directly to the Door-EZ limit switch inputs

Note: The CO-Prox board mounts to the limit switch inputs with the terminal strip facing down (towards the bottom)

Note: The EOL resistor is not required when using a Proximity Sensor



Note: Only PNP type limit switches are compatible

Input LED Status:

Each digital input has a corresponding LED that monitors the input status.

Input LED Status:

- Off – Normal
- On- Tripped
- Slow Blink – Trouble
- Fast Blink – Ground fault

Ce-Door-EZ

Input Description:

- Manual Open – When activated controls the open relay output, configurable for NO or NC
- Manual Close – When activated controls the close relay output, configurable for NO or NC
- Manual Stop – When activated stops the action of any current function, the action can be restated by pressing Open or Close, configurable for NO or NC

  Note: if the stop input is held closed no other inputs can operate the door
- Auto/Manual - Selects mode of system, in auto all safeties active, in manual safeties off and controller buttons are continuous push
- Card Reader - Connects to a card reader that provides access if valid
- Fire Input - When activated disables all safeties and sends and open command
- Interlock Safety - When activated prevents the manual buttons from controlling the door/gate action until restored
- Safety 1– Input from detection device that will reverse the Door/Gate action if activated during a closing action. The input will also prevent the Door/Gate from opening if activated
- Safety 2– Input from detection device that will reverse the Door/Gate action if activated during a close action. The input will also prevent the Door/Gate from opening if activated
- Safety 3 - Input from detection device that will reverse the Door/Gate action if activated during a close action. The input will also prevent the Door/Gate from opening if activated
- Safety 4 - Input from detection device that will reverse the Door/Gate action if activated during a close action. The input will also prevent the Door/Gate from opening if activated
- Photo Eye 1 - Input from detection device that will reverse the Door/Gate action if activated during a close action. The input will also prevent the Door/Gate from opening if activated
- Photo Eye 2 - Connects to a safety loop that is used as a presence loop for card reader access
- Radio Control – Programmable input to open/close or open only based on a timer

  Note: if using the radio input a manual open/close input must be tripped before the radio input becomes active
- Open Limit Switch – Input that stops the motor when activated by full open position (mechanical or proximity)
- Close Limit Switch – Input that stops the motor when activated by a full close position (mechanical or proximity)
- Input 1 - Auxiliary input/Enclosure Tamper

Relay Output Wiring:

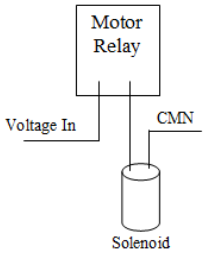
Five (5) Form-A relays that are, supervised, and dedicated for their purpose. And Two (2) Form

C relays for Aux/Traffic Lights and Door Position

Form A Relays:

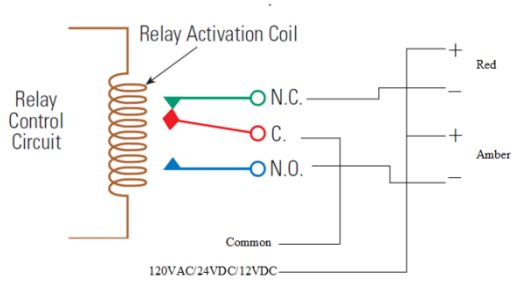
Relay 1
Open
Door in Motion
Close
Warning Horn

Form A relays require a voltage in and switch that voltage when activated



Form C Relays:

Door Position
Traffic Lights/HVAC



Note: Using a form C relay either ground or positive voltage can be switched

Output Description:

- Output 1 - not defined
- Open – Activated by the open input or specific safeties
- Close - Activated by close input or specific safeties
- Close Warning– Activated during a close function, timer controlled
- Door Position - Provides an output when the limit switch is activated for open or close
- Door in Motion – Provides and output while the Door/Gate is moving
- Traffic Light Relay – Form C relay supplies power to the traffic lights, both amber and red lights are wired off the relay or used to shut down HVAC if door is left open

On-board Programming:

A number of programming items can be accomplished from the Ce-Door-EZ module by using the LCD screen and programming buttons

Program Items:

Set Timers:

Open Timer:
Programs the amount of time in seconds the door motor will run, if a limit switch is present the motor will stop when activated. Default is 15 seconds.

Close Timer:
Programs the amount of time in seconds the door motor will run, if a limit switch is present the motor will stop when activated. Default is 15 seconds.

Open Warning Timer:

How long the warning horn output will remain active when a door is in motion. Default 60 seconds

Advanced Programming:

Note: All inputs default On, if not being used turn Off in programming

Input Programming:
Allows the changing of inputs to:
- Normally Open - NO
- Normally Closed - NC
- Disabled

Safety Actions:
Allows the setting of how the safety input reacts
- Reverse
- Stop
- Reverse for 2 seconds

(Motor Mod Fault setting sets the safeties on the He-Motor board)

Safety Active:
Selects when the Safeties are active
- Open
- Close
- Open and Close

(Motor Current Safety Active works with the He-Motor board only)

Re-Secure Retry:
- Enabled (Default)
- Disabled

Motor Mode:
- One Motor - select for single door
- Two Motors - select for dual motor gate
- Three Motors - select for a three motor gate

Relay Delay Time:
- 0-2000 mSec

Output 2 Function:
Selects how output 2 activates
- Traffic Lights (Default)
- HVAC

Auto ReSecure Mode:
- Exit Loop
- Both Loops
- Auto Close

Door Open Warning:
If enabled activated the Warning output if the door is open too long
- Enabled
- Disabled (Default)

Traffic Safety Loop:
- Enable (Default)
- Disable

Warning Horn:
Select when the horn sounds
- Close only (default)
- Open and Close
- Disabled

Card Reader Mode:
When the input is active (Aux Input)
- Entry (Default)
- Entry and Exit

Traffic Light Red:
- Presence Light Clear (Default)
- Resecure restart

Auto Close Delay:
Sets the delay time after a door is open, before automatically closing
- 00 Seconds

Input Current Factor: (used for overcurrent programming on the He-Motor)
- 1.20 X

Input Scan Time:
Sets how long an activation must remain across an input before activating
- 288 mSec

24V Out Enabled:
Turns on the 24VDc output
- Enabled (default)
- Disabled

Set Access Code:
Allows the user to change the code used to enter advanced programming

Default 1234

HeLAN Enrollment:
Enroll devices connected to HeLAN

Cycle Test Count:
The cycle test opens and closes the door for a set number of cycles, set the total count number
Number of cycles to run during test

Cycle Test Time:
During the cycle test set how long between open and close activations
Time between cycles during test

Entering/Exiting Program Mode:

Press and hold the Select button for about 5 seconds the display will read:

* Program Mode *
Press Advance

Press the Advance/Back button to scroll to Set Time

Set time
00:00 Jan 1

Current Time/Date: Press the “select” button an M will display. Use the Advance/Back buttons to adjust, when the values are set use “select’ button to adjust the next value. When done press select again to save

Set Timers
Press Sel - Entr

Use the Advance/Back buttons to scroll to Set Timers

Press Select Button to enter Timer programming

Press the Advance/Back button to begin scrolling through programming

Setting a Time:

- Open Time
- Close Time
- Open Warning Time

Press the Advance/Back button until Open Time. is displayed. The default or per-programmed setting will be displayed (15 Seconds)

To change the setting press the Select button, an M will display

Open Time Max.
15 Seconds M

Using the Advance/Back buttons select the time required, when complete press the Select button and the M will no longer display

Use the Advance/Back button to scroll to the next timer menu and follow the above sequence.

When all timers are set select exit from the timer menu, use the Advance/Back button to scroll to Advance Program Menu

Entering Advanced Programming Mode:

Advanced Prog
Press Sel - Entr

Press the Select Button

Enter Code
_ _ _ _ - Entr

Enter access code by pressing the Advance/Back buttons to select the number and the Select button to enter (default code -1234)

In Advanced Programming the access code can be changed by scrolling to Set Access Code

Advance programming Items:

- Input Program
- Safety Action
- Safety Active
- Output 2 Function
- Traffic Loop
- Warning Horn
- Card reader Mode
- Traffic Light Red
- Auto Close Delay
- Input Current Factor
- Input Scan Time
- Re-Secure Retry
- Motor Mode
- Auto ReSecure Mode
- Door Open Warning
- Traffic Safety Loop
- 24VDC Output
- Cycle Test
- Cycle Test Timer
- Set Access Code
- HeLAN Enrollment

Programming an option:

1. Use the Advance/Back buttons to scroll to the item
2. Press Select an M will display indicating program mode
3. Use the Advance/Back buttons to select the option
4. Press Select to save
5. Use the Advance/Back buttons to scroll to the next item
6. To exit scroll to Exit Advance Program and press Select

View Event Buffer:

View Event Hist Press Adv - View

Use the Advance/Back buttons to scroll through the Ce-Door-EZ history

Ce-Door-EZ Module Testing:

Each individual input can be tested on the Ce-Door-EZ module prior to operation, this verifies each input and output is operating

Entering Test Mode:

1. Remove power from the module
2. Hold down the Advance and Back buttons
3. While holding the buttons apply power
4. Hold the buttons until the LCD displays

*** Zone Test*** ****Active****

5. Activate each input by shorting the input or actually activating the device. The LCD will display when activated
6. Activate each input and verify the reading
7. Press the Back button to active the Output Test, during this test the outputs will activate and light the LED's
8. Press and hold the two buttons again to exit test mode

Cycle Test Operation

A cycle test is performed to test the overall door operation by continuously running open and close transitions. The number of cycles and time between cycles required are programmed into the Door-EZ module, and upon an open or close activation the door/gate will continue to cycle for the programmed amount.

Note: pressing the Stop button at any time during the test will abort the test and it must be re-programmed.

Programming:

1. Enter program mode by holding down the Select button until the LCD displays Program Mode
2. Using the Advance/Back buttons scroll to Advanced Programming

3. Press Select and using the Advance/Back buttons enter access code (default 1234)
4. Use the Advance/Back buttons and scroll to Cycle Test, press Select (an M will display)
5. Using the Advance /Back buttons enter the number of cycles required for the test (1 cycle = 1 open +1 close), press Select to enter
6. Using the Advance/Back buttons scroll to Cycle Time, press Select (an M will display)
7. Using the Advance/Back buttons set a time between open and close intervals for the test to run (note: time must be set higher than the door/gate travel time) press Select to enter
8. Using the Advance/Back buttons scroll to Exit Advance Program Mode, press Select
9. Using the Advance/Back buttons scroll to Exit Program Mode, press Select

To start test activate door/gate open or close button. The test will begin and continue until all cycles count down.

The LCD will display a countdown during each cycle

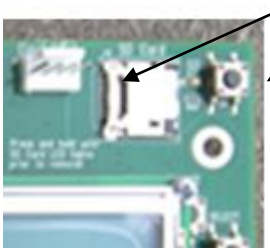
The test can be aborted at any time by pressing the Stop button; if the test is stopped the cycles and timing must be re-programmed

SDI Card Operation

The Ce-Door-EZ has a SDI card slot located on board; the system stores all events on the card which can be read using a PC

Operation:

Slide left and lift to remove and insert card



Press button until LED lights to remove card

Press and hold until SD Card LED lights prior to removing Card

Card can be installed at any time during operation

Card removal:

1. Press and hold the button located to the right of the card until the SD LED lights
2. Remove the card by sliding the entire card holder up and flipping it open
3. Carefully remove the card by handling it by the top plastic cover

Card Reading:

1. Using a SD card reader connected to a PC select the file on the card
2. The file will open within Excel

Card installation

1. Make sure hold is tilted open, place card face up (metal bars facing towards the board) in the holder
2. Push the holder down and slide down to lock into place

Safety Loop Operation:

Loop Inputs: (Safety 3 or 4)

Presence-Safety- Allows Safety 3 or 4 to function as both safety and presence function. On presence it will trigger an open sequence working in conjunction with card reader input. The loop will also act as a safety to prevent operation of triggered.

Advanced programming:

- Traffic Safety Loop – Enabled
- Card Reader Mode – Enabled (if used)

- Auto Resecure Mode:
  - Exit Loop – will close door/gate after the exit loop is clear
  - Both Loops – will close the door/gate when both presence and exit loops are clear for 3 seconds
  - Auto Close – will close after exit loop clear even if vehicle sitting on presence loop, requires card input

Specifications:

Power Supply

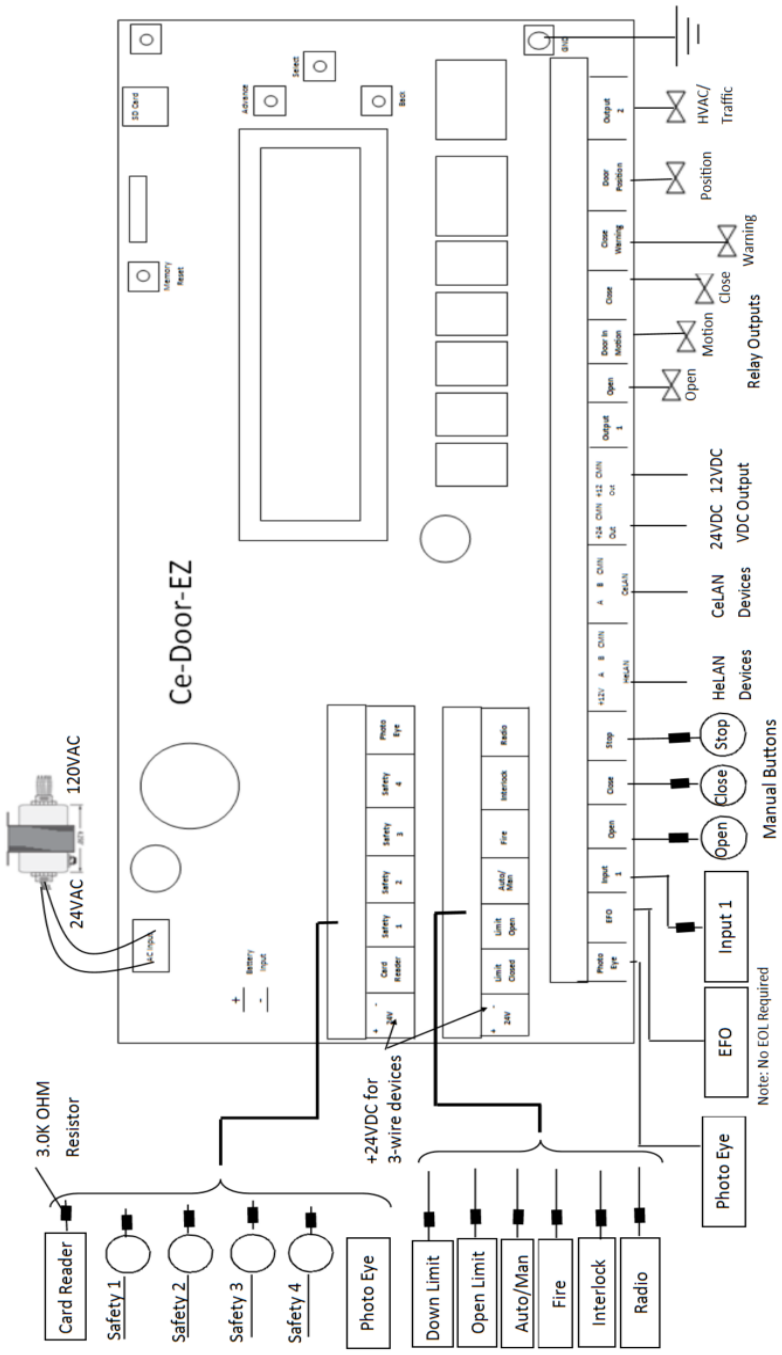
- Input:
  - Transformer Manufactured by Functional Device Inc, model TR100VA004. Primary: 120VAC, 60Hz; Secondary: 24VAC, 5A.
- Tolerated Input Voltage range: 16.5 VAC – 30 VAC
  - Rated Output current is available at or above 24 VAC.
- Backup Battery:
  - 12VDC @ 1.5A charge maximum / battery. Source current limited
- Battery Test: Every 4 hours (default) or 24 hours
- Output Power:
  12VDC
  - Maximum: 5.0 A

  24VDC
  - Maximum: 2.5A
- Battery Charge current is limited to 1.0A
- CeLAN: 128 Bit AES Encrypted, RS485, ½ Duplex, 38k BPS.
- HeLAN: 128 Bit AES Encrypted, RS485, ½ Duplex, 38k BPS.

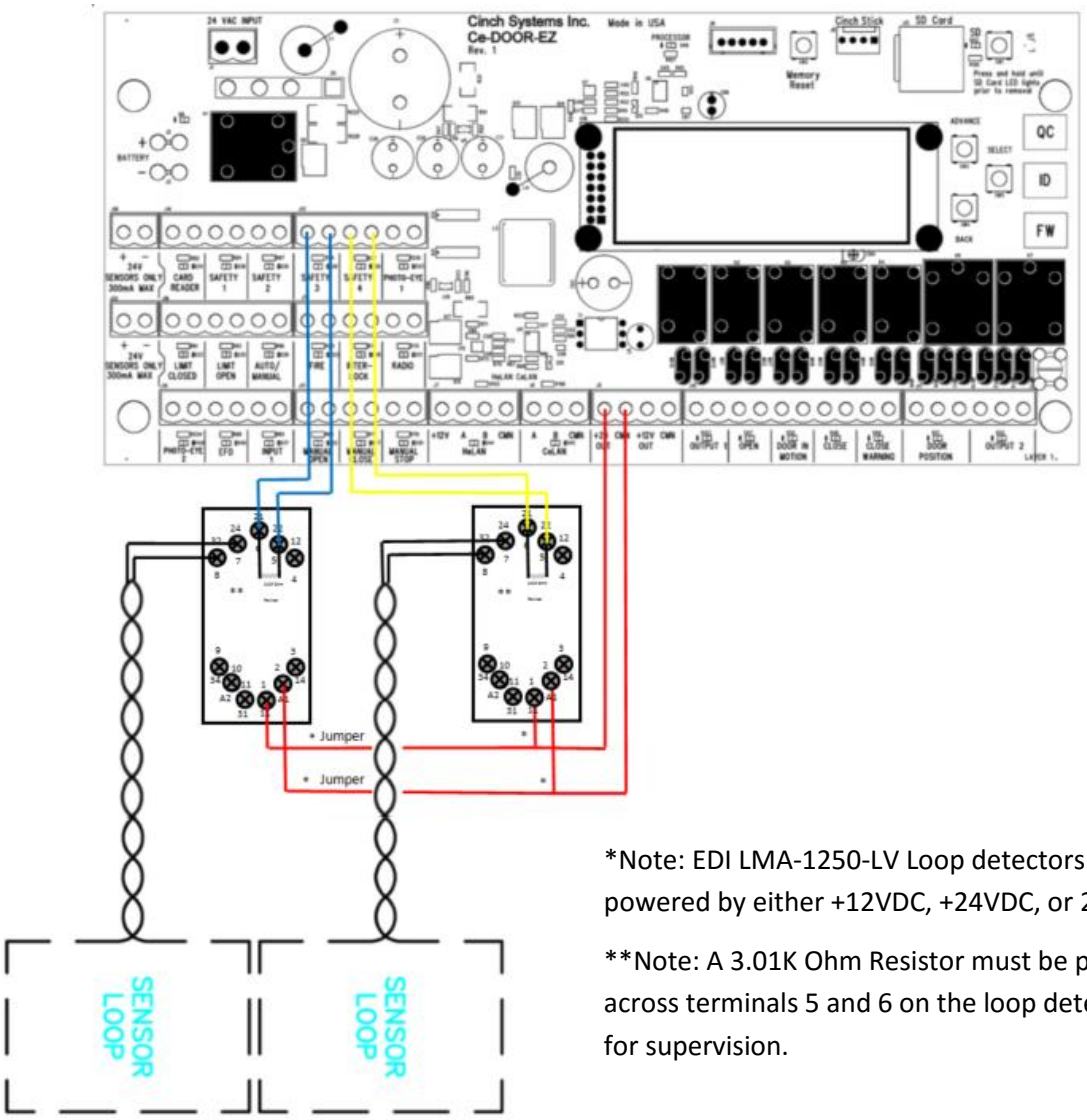
Environmental

- Operating Temperature: 23° to 131° F (-5° to 55° C). Up to 140° F or 60° C under temporary conditions.
- Storage Temperature: -30° to 140° F (-34° to 60° C)
- Maximum Humidity:90% relative humidity; non-condensing

Ce-Door-EZ


Ce-Door-EZ
120VAC
24VAC
HVAC/ Traffic
Position
Warning
Close
Motion
Open
Relay Outputs
24VDC 12VDC
VDC Output
CeLAN Devices
HeLAN Devices
Stop
Close
Open
Manual Buttons
Input 1
EFO
Note: No EOL Required
Photo Eye
+24VDC for 3-wire devices
3.0K OHM Resistor
Card Reader
Safety 1
Safety 2
Safety 3
Safety 4
Photo Eye
Down Limit
Open Limit
Auto/Man
Fire
Interlock
Radio

Safety Loop Wiring:



*Note: EDI LMA-1250-LV Loop detectors can be powered by either +12VDC, +24VDC, or 24VAC

**Note: A 3.01K Ohm Resistor must be placed across terminals 5 and 6 on the loop detectors for supervision.

Programming Worksheet:

Date: _____ Location/Site Name: _____

Project Manager: _____

Site Contact: _____

Part Name	Device ID #	Location	Text
Ce-Door-EZ	A765B2	Front Entry	Second Street Gate

Ce-Door-EZ

Open Time	Time: _____
Close Time	Time: _____
Open Warning Time	Time _____
Input Program	
Safety Input 1	NO _____ NC _____ Disabled _____
Safety Input 2	NO _____ NC _____ Disabled _____
Safety Input 3	NO _____ NC _____ Disabled _____
Safety Input 4	NO _____ NC _____ Disabled _____
Photo Eye 1	NO _____ NC _____ Disabled _____
Interlock	NO _____ NC _____ Disabled _____
Limit Close	NO _____ NC _____ Disabled _____
Limit Open	NO _____ NC _____ Disabled _____
Auto/Man	NO_____ NC_____ Disabled_____
Fire	NO _____ NC _____ Disabled _____
Radio	NO _____ NC _____ Disabled _____
Auxiliary	NO _____ NC _____ Disabled _____
Photo Eye 2	NO _____ NC _____ Disabled _____
EFO	NO_____ NC_____ Disabled _____
Input 1	NO _____ NC _____ Disabled _____
Manual Open	NO _____ NC _____ Disabled _____
Manual Close	NO _____ NC _____ Disabled _____
Manual Stop	NO _____ NC _____ Disabled _____

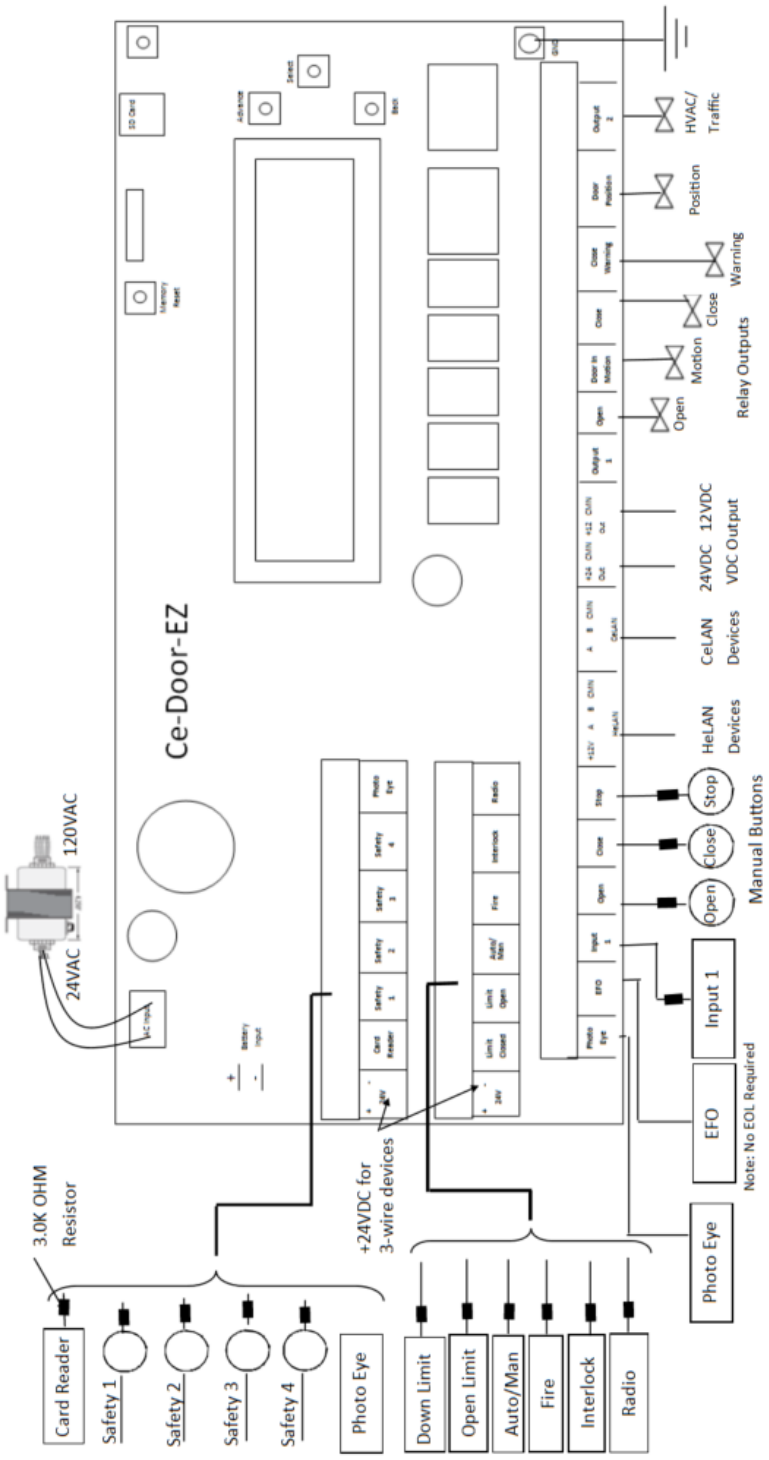
Safety 1 Action	Reverse _____ Stop _____ Reverse 2 sec. _____

Safety 2 Action	Reverse _____ Stop _____ Reverse 2 sec. _____
Safety 3 Action	Reverse _____ Stop _____ Reverse 2 sec. _____
Safety 4 Action	Reverse _____ Stop _____ Reverse 2 sec. _____
Photo Eye 1 Action	Reverse _____ Stop _____ Reverse 2 sec. _____
Photo Eye 2 Action	Reverse _____ Stop _____ Reverse 2 sec. _____
Motor Board Fault	Reverse _____ Stop _____ Reverse 2 sec. _____
Safety 1 Active	Close _____ Open _____ Both _____
Safety 2 Active	Close _____ Open _____ Both _____
Safety 3 Active	Close _____ Open _____ Both _____
Safety 4 Active	Close _____ Open _____ Both _____
Photo Eye 1 Active	Close _____ Open _____ Both _____
Photo Eye 2 Active	Close _____ Open _____ Both _____
Motor Board Fault	Close _____ Open _____ Both _____
Output 2 Function	Traffic Lights _____ HVAC _____
Traffic Safety Loop (Safety 6)	Enabled _____ Disabled _____
Warning Horn	Close _____ Open and Close _____ Disabled _____
Card Reader Mode	Entry _____ Entry/Exit _____
Traffic Light Red	Pres Loop Clear _____ ReSecure start _____
Input Scan Time	Time _____
Auto Close Delay	Time: _____
Re-Secure Retry	Enable _____ Disable _____
Motor Mode	1 Motor _____ 2 Motors _____ 3 Motors _____
Auto Re-Secure Mode	Exit Loop _____ Both Loops _____ Auto Close _____
Door Open Warning	Enable _____ Disable _____

Ce-Door-EZ

Traffic Safety Loop	Enable _____ Disable _____
24VDC Output	Disabled _____ Enabled _____
Set Access Code	Code _____
Cycle Test Count:	#Cycles _____
Cycle Test Time:	Time between cycles: _____
HeLAN Enrollment	ID # _____
	ID # _____
	ID # _____
	ID# _____

Ce-Door-EZ


Ce-Door-EZ
120VAC
24VAC
3.0K OHM Resistor
+24VDC for 3-wire devices
Card Reader
Safety 1
Safety 2
Safety 3
Safety 4
Photo Eye
Down Limit
Open Limit
Auto/Man
Fire
Interlock
Radio
Photo Eye
EFO
Note: No EOL Required
Input 1
Manual Buttons
Stop
Close
Open
HeLAN Devices
CeLAN Devices
24VDC 12VDC VDC Output
Relay Outputs
Open
Motion
Close
Warning
Position
HVAC/ Traffic

Appendix A: Contactor Wiring